

Materials List for:

Magnetic Tweezers for the Measurement of Twist and Torque

Jan Lipfert¹, Mina Lee¹, Orkide Ordu¹, Jacob W. J. Kerssemakers¹, Nynke H. Dekker¹

¹Department of Bionanoscience, Kavli Institute of Nanoscience, Delft University of Technology

Correspondence to: Nynke H. Dekker at n.h.dekker@tudelft.nl

URL: <https://www.jove.com/video/51503>

DOI: [doi:10.3791/51503](https://doi.org/10.3791/51503)

Materials

Name	Company	Catalog Number	Comments
Sandblaster	Great Lake Orthodontics	190-070 Microetcher II	
Nitrocellulose	Life Technologies	LC2001	
Magnetic particle concentrator	Life Technologies	12002D	
Non-magnetic latex beads (0.5 µm radius)	Polysciences	17010	
Non-magnetic latex beads (1.5 µm radius)	Sanbio	PV05N/2179	
Antidigoxigenin	Roche	11 214 667 001	
Streptavidin-coated superparamagnetic beads (0.25 µm radius)	Ademtech	3150	
Streptavidin-coated superparamagnetic beads (0.5 µm radius, "MyOne")	Life Technologies	650.01	
Streptavidin-coated superparamagnetic beads (1.4 µm radius, "M270")	Life Technologies	653.05	
Biotin-coated latex beads (0.5 µm radius)	Life Technologies	F-8768	
Cubic magnets for conventional tweezers	Supermagnete	W-05-N50-G	
Cylindrical magnet for MTT and FOMT	Supermagnete	R-06-02-02G	
Side magnet for MTT	Supermagnete	S-04-07-N	
Linear stage	Physik Instrumente	M-126.PD	
Rotary stage	Physik Instrumente	C-150	
High-resolution automated sample stage	Physik Instrumente	P-733.2D	
Software for coding analysis routines	The Mathworks	MATLAB	custom-written routines are available from the authors